Title: PREREQUISITE-BASED SCHEDULER Inventor(s): Marc Timothy JONES et al.

Application No.: Not yet assigned Docket No.: 491442003100

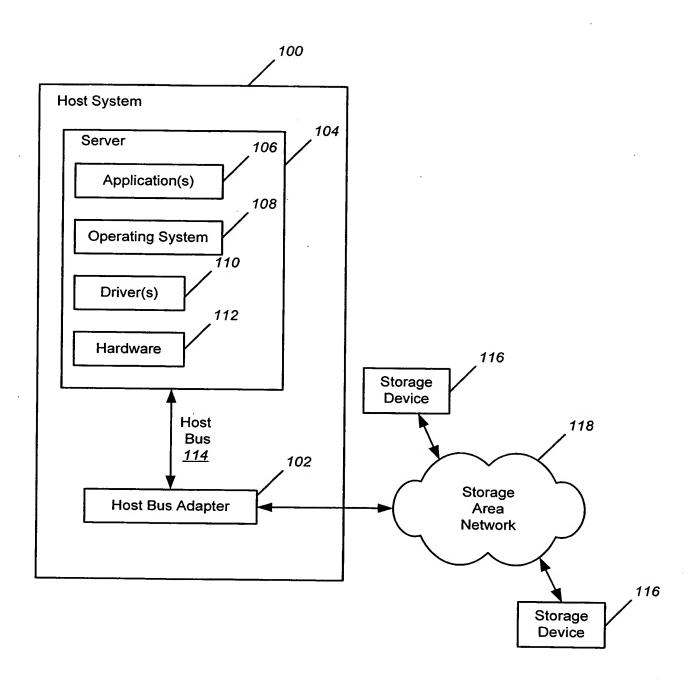


FIG. 1

Inventor(s): Marc Timothy JONES et al. Application No.: Not yet assigned Docket No.: 491442003100

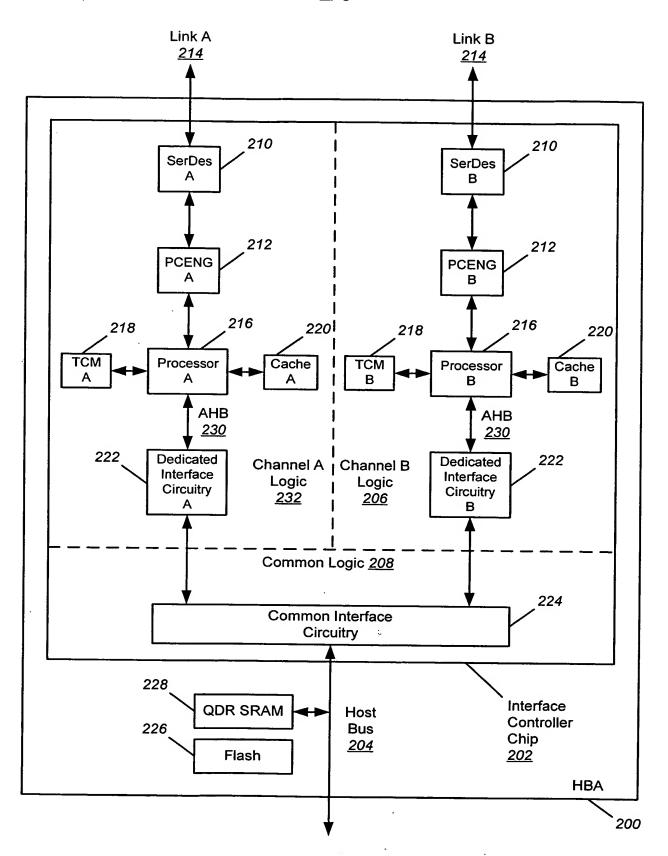


FIG. 2

Inventor(s): Marc Timothy JONES et al.
Application No.: Not yet assigned
Docket No.: 491442003100

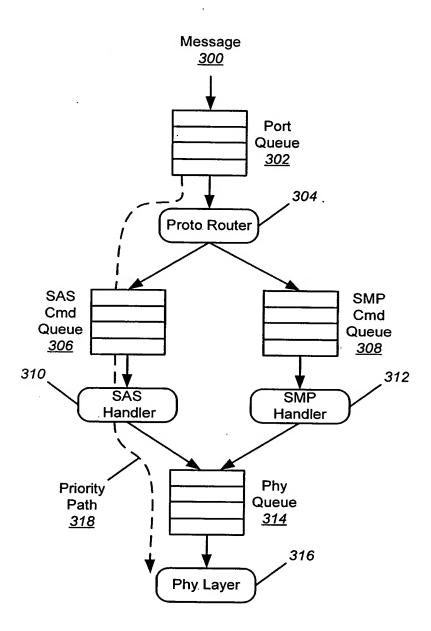


FIG. 3

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| | Port Queue | | SAS Cmd Queue | | SMP Cmd Queue | | Phy Queue | | |
|--------------|----------------|--------|------------------------|--------|------------------|--------|----------------|--------|------|
| | !Full | !Empty | !Full | !Empty | !Full | !Empty | !Full | !Empty | |
| Proto Router | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 400 |
| SAS Handler | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | /400 |
| Phy Layer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | ¥ |
| SMP Handler | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |
| Idle Task | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | | |
| System State | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | |
| | | | | | | | | | |
| | Empty Queue | | Contains Message(s) | | Empty Queue | | Empty Queue | | |

FIG. 4

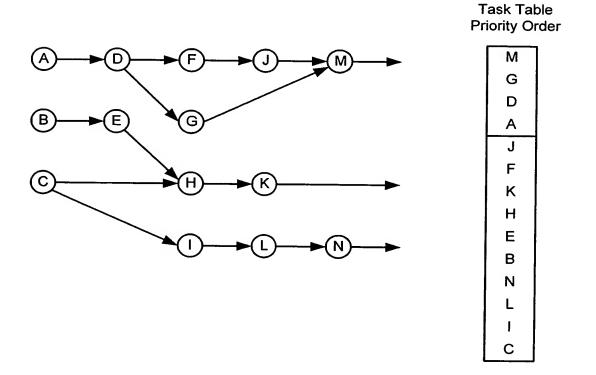


FIG. 5

Inventor(s): Marc Timothy JONES et al. Application No.: Not yet assigned Docket No.: 491442003100

| Task | Prerequisites | Implied Priority | Block Priority |
|------|---------------|------------------|----------------|
| М | | 0 | |
| G | | 1 | 0 |
| D | | 2 | |
| Α | | 3 | |
| J | | 4 | |
| F | | 5 | 1 |
| K | | . 6 | |
| Н | | 7 | |
| Е | | 8 | 2 |
| В | | 9 | |
| | | 10 | |

FIG. 6

| Limit | Flags[0] | Flags[1] | Flags[2] | Flags[3] | |
|-------|----------|----------|----------|----------|--|
| 0 | Х | 0 | 0 | 0 | |
| 2 | 0 | Х | Х | 0 | |
| 1 | Х | Х | 0 | 0 | |
| 3 | X | 0 | 0 | х | |

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| _ | Buffer Pool | | Messag | e Queue | SLI-2 | Cmd TO |
|---------|-------------|--------|--------|---------|-------|---------------|
| | !Full | !Empty | !Full | !Empty | On | Timed- Out |
| Task_0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Task_1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Task_TO | 0 | 0 | 0 | 0 | 1 | 1 . |
| Idle | 0 | 0 | 0 | 0 | 0 | 0 |

FIG. 8A

